Revision Date: 9/13/2011

# SAFETY, HEALTH, AND ENVIRONMENTAL MANAGEMENT PROTOCOL FOR FIELD ACTIVITIES

U.S. Environmental Protection Agency Research Triangle Park, North Carolina

## **PURPOSE**

To ensure adequate review of safety issues and equipment to identify potential hazards and to verify establishment of contact with facility safety representative(s).

This protocol assumes that EPA personnel and their representatives will perform their facility visit escorted by a facility representative. This representative will be cognizant of the facility safety and emergency procedures, will provide to the EPA staff and representatives information on the essential facility safety and emergency procedures, and will remain with the EPA team while on site.

## PART I. PROJECT INFORMATION

Project Title: An epidemiologic health study of manganese (Mn) exposure in East Liverpool, Ohio
Dates/Duration of Field Activity: November 3- November 6, 2011
Principal Investigator (PI): Danelle T. Lobdell
Laboratory, Division, Branch: NHEERL/EPHD/EB
Phone: Office: 919-843-4434   Site (or Celli): 919-270-8330
Field Site Name/Address: East Liverpool Motor Lodge, East Liverpool, OH
Site Type: hotel/motel (i.e., manufacturing plant, roadside, woods, contamination cleanup site, lake, etc.)
OMIS Task # (if applicable):
OMIS Title (if applicable):
National Environmental Policy Act (NEPA) Requirements
Will the project encounter / impact endangered species (plants / animals)? Yes No Will the project encounter / impact any historic sites (burial grounds, monuments, etc.)? Yes No Will the project involve drilling, soil samples, or any soil impact? Yes No Will the project involve any potential uncontrolled impacts to water / air and/or discharges approaching regulatory limits?  Yes No NOTE: If YES to any of the above, please contact your Division NEPA Officer to conduct a review prior to approval.
PI Signature: Danelle Lobdell (Principal Investigator must be an EPA employee)  APPROVALS Branch Chief: Date: Date: (Obtain signatures above prior to sending to the ORD SHEM Office (MD-D343-02 or archer_john@epa.gov))  ORD SHEM Office: Date:
SHEM Protocol for Field Activities 1 Revised 9/11

## PART II. PROJECT INFORMATION

# A. Detailed Study Description (Research or Monitoring Protocol should be attached if applicable):

This project is a cross-sectional study examining air Mn exposure and neurologic health effects. The researchers are only on site as observers and will not be collecting data. The site is at a local hotel central to where study participants live and can easily access for study protocol. The total study is for 4 days November 3-6, 2011. Health and clinical data as well as biological samples will be collected.

#### B. Personnel (List EPA personnel only)

NOTE: Each signatory certifies the statement below:

"I have reviewed this Safety Health and Environmental Management Protocol for Field Activities and agree to comply with all procedures and protective measures outlined in the protocol."

Name	Signature	*Medical Monitoring	*Field Activity Training	*First Aid	*AED / CPR	*HAZWOPER
Danelle T. Lobdeil	Danese Lobdell					
B. Michael Ray	8. mlal They					
	V					
,						

<sup>\*</sup>Indicate if personnel are: 1) Participants in the Occupational Medical Surveillance (Medical Monitoring) Program and 2) Up-to-date in Field Activity Safety Training and/or any other training.

If no, provide explanation in Comments section below.

## Comments

This project is a cross-sectional study examining air Mn exposure and neurologic health effects. The researchers are only on site as observers and will not be collecting data. The site is at a local hotel central to where study participants live and can easily access for study protocol. The total study is for 4 days November 3-6, 2011. Health and clinical data as well as biological samples will be collected.

Address: 2340 Dresden Ave., East Liverpool, OH 43920 Is this site a remote location or an urban setting ?	
is this site a remote location or an urban setting	
to number of innitiates temperated it for mer memory and a first first	
If site is in a remote location, include a map and global positioning system or longitude/latitude collis this site domestic or international ?	ordinates.

	Identify the type(s) of environments the study will be conducted in:	
	Mobile Laboratory Non-EPA Laboratory Terrestrial Ecology Aquatic Ecology Industrial Site Other	
D.	Contact Personnel for Field Site	
	Contact Name: Rosemarie Bowler, Ph.D., M.P.H.	Ę.
	Title: Study coordinator (under contract)   Phone #: 510-236-5599	
E.	Government Vehicle to be Taken? Yes No	
	If yes, First Aid Kit? Yes No Fire Extinguisher? Yes No Other Supplies? Yes No If yes, list:	
F.	Copies of Forms (Motor Vehicle Accident, Injury/Illness) Available? Yes No	
	. MARTER 12 5 5 5 5 MILES AND	

# PART III. HAZARD INFORMATION

# A. Potential Hazards Encountered during Field Study

Task	Hazard Category	Hazard	Controls	PPE
Collection of blood,	Biological	Biological - Human Blood / Fluids	Pos	Neoprene
toenails and hair	Transfer of the second	Dictiogram - Trainings property contra		Lab Goat
samples, NOTE: The contractor will collect and				Eye
process.		50m3146600000000000000000000000000000000000		Other
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				Eye
		vocation in the second		Other
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<u></u>				Hand
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				Harvd
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				Eye
				Other
			L	Hand
XX	Choose an item.	Crocre an item.	Choose an item.	Body

Task	Hazard Category	Hazard	Controls	PPE
				Eye
				Other
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	Oliocean sent	Choose as verti.	2 Cutodata assuressir	Body
				Ey#
				Other
	Choose an item.	Choose an item.	Choose an item.	Hand
	LANDOSE GRITTONIO	Concord on therr).	CARDOSE STREET.	Body
				Eye
				Other

<sup>\*</sup> When respirator is checked, personnel using respirators must have been properly trained and fitted for the respirator within the past twelve months. Individuals using a respirator must be enrolled in the Respiratory Protection Program to remain eligible to wear respiratory protection equipment of any kind.

1.	Identify any locations on the site that EPA personnel are restricted from entering. (Note: Employees are no
	authorized to enter confined spaces.)

N/A

2. Ideni	fv anv	ore-field	VISIT	vaccinations	that	are	necessarv	
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Tetanus Hepatitis A (wastewater)
Hepatitis B (blood, body fluids)
Other
None required

3. Describe the level of physical exertion required:

·	
	Low (Office work)
	Moderate (Frequent walking)
	High (Frequent climbing, lifting)

## B. Toxicity of Materials to be Used

1. Will any chemical materials be used that are considered hazardous agents by the ORD SHEM Office?

A hazardous agent, as defined by the ORD SHEM Office, a hazardous agent exhibits one or more of these characteristics:

- Has an LD50 (oral, rat) < 50 mg/kg body weight</li>
- Has an inhalation LC50 toxicity (rat) < 2 mg/liter or < 200 ppm</li>
- Has a dermal LD50 toxicity (rabbit) < 200 mg/kg</li>
- Has an occupational exposure limit (OSHA, NIOSH or ACGIH) ≤ 1 ppm
- Causes teratogenic or mutagenic effects (in humans or animals)
- is an infectious biological agent (as defined by CDC and/or NiH).
- Is an explosive or violently reactive agent (shock sensitive, peroxide forming, and/or incompatible with moisture/air)
- · Is a sensitizing agent
- Nanoparticle research involving the use or manufacture of particles (Bucky balls, nano tubes, quantum dots, etc.) that is not contained in solution and/or with the possibility of airborne exposure.
- Is an agent whose toxicological characteristics are unknown, but it is suspected of meeting one of the above criteria

\*EXCEPTION: Standards ordered from vendors in sealed vials or ampoules that are used directly in laboratory instrumentation are exempt even if they meet the above criteria.

	Yes	No	if ves.	List in	the	table	below:	
L	* 4000	5 78 S.D	er America	PW1-Ch7 . 13-1	E.P192	ter.	Medical Fr.	

# C. Hazardous Agent(s):

Provide the following information for any hazardous agent that will be taken into the field by EPA personnel.

*Chemical Name	CAS No.	Physical Form	Quantity Taken in Field	Condition / Method of Storage and Transport	DOT Labeling Requirements (Contact ORD SHEM Office for assistance at 1-2613)
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<sup>\*</sup>Attach a copy of Material Safety Data Sheet (MSDS) for each chemical listed above, or a copy of information found in NIOSH Registry of Toxic Effects of Chemical Substances

#### D. Hazardous Waste Disposal

(Fill out the following information <u>only if</u> you are taking materials into the field and anticipate generating waste materials that <u>must</u> be returned to an EPA facility.)

Type of Waste Generated	Waste Volume	Time Period (e.g., weekly solvent waste)	Any unused stock? ( <u>yes</u> or <u>no</u> )	If unused stock, will it be <u>kept</u> on site or <u>disposed of</u> ?
N/A				
		,		
-				

# PART IV. EMERGENCY PROCEDURES

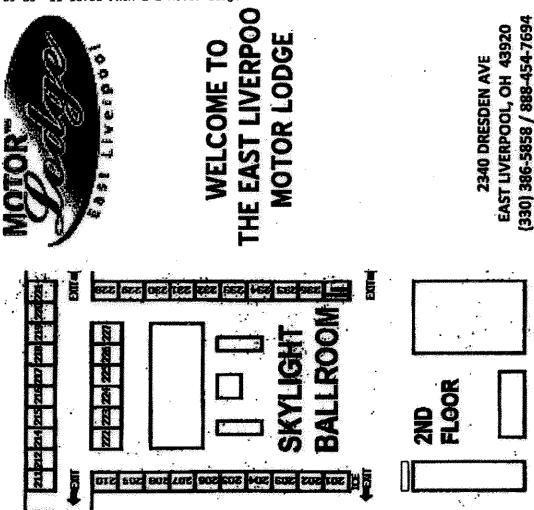
This information must be coordinated with representatives from the field site. This refers to the emergency procedures dictated by the site personnel.

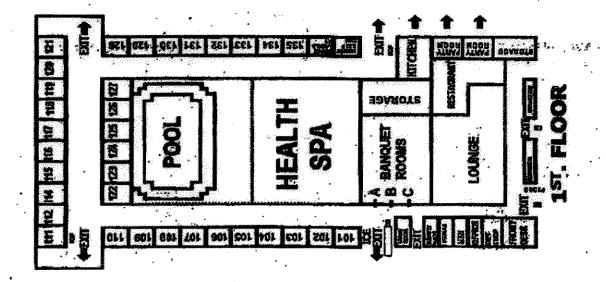
#### A. In the event of an accident or chemical/biological spill:

Describe procedures in event of personal exposure (inhalation, ingestion, inoculation, asphyxiates, flammables, corrosives, etc.):

The collection of biologic samples will be conducted by contractor. EPA personnel should not have contact. In the event of an accident exposure to biological samples, mainly blood, the area on the body exposed should be washed thoroughly with copious amount of water and soap. If exposure occurred where there is a break in the skin or injury occurred through puncture (e.g., needle injury), then the employee is to go to local Urgent Care or

	2.	Describe plans for containment to prevent spread of the agent from the immediate area, decontamination procedures and monitoring methods to assure decontamination.
		Note, this activity will be conducted by contractor. EPA personnel should have not contact nor should they be involved with any decontamination procedures.
	3.	Describe the procedures for emergency evacuation of the facility.
		There are clearly marked exit signs listed for the facility (see attached diagram). In the event of an emergency, all personnel are to leave at the designated emergency exits.
В.	ln :	the event of a medical emergency:
<b>.</b>		Emergency phone number (Is 911 available or does facility have its own medical emergency number)?  911 is available
	2.	is response by EMS available? Yes No
	3.	Include the hospital name, address, phone number and location relative to the site if EMS crew will not be available to provide emergency transportation.  Hospital: East Liverpool City Hospital
		Address: 425 W. Fifth Street, East Liverpool, OH 43920 Phone #: 330-385-7200
'Pie	ase al	ttach (copy and paste) map or directions for first response hospital closest to site:
	4.	Is first response hospital equipped to handle:  Burns? Chemical splashes (skin, eye, respiratory)? Chemical burns? Severe trauma? Insect stings, bites, etc.
		If the answer to any of the above is no, designate an alternate facility that can handle these types of injuries.  Hospital:
		Address:
		Phone #:

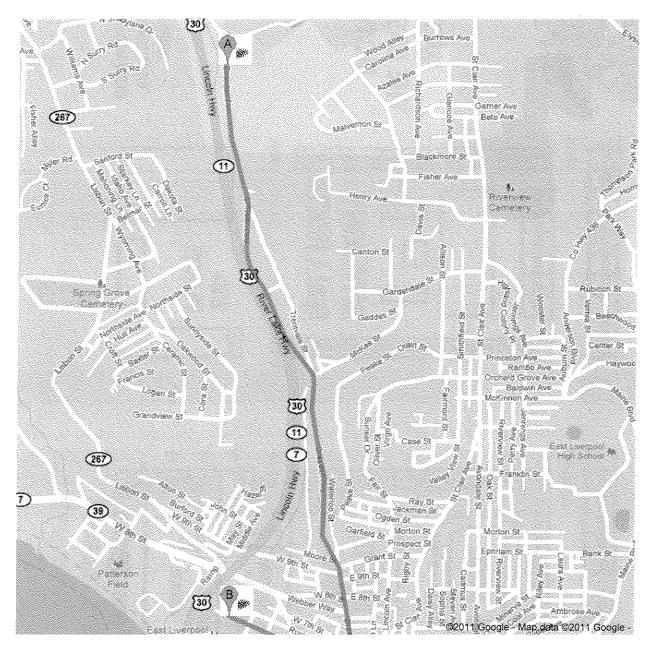






Directions to East Liverpool City Hospital East Liverpool, Ohio - (330) 385-7200 2.0 mi - about 6 mins







## East Liverpool Motor Lodge

2340 Dresden Avenue, East Liverpool, OH 43920-9007 - (330) 386-5858

Head south on Dresden Ave toward Pauls Ln
 About 1 min

go 0.4 mi total 0.4 mi

7 2

Slight right to stay on **Dresden Ave** About 4 mins

go 1,3 mi total 1,6 mi

3 Turn right o



3. Turn right onto **W 6th St** About 2 mins go 0.4 mi total 2.0 mi



East Liverpool City Hospital

East Liverpool, Ohio - (330) 385-7200

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2011 Google

Directions weren't right? Please find your route on maps.google.com and click "Report a problem" at the bottom left.